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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,240	08/02/2001	Jason Wayne Wrape	00970	6011

45695 7590 07/05/2006

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EXAMINER

CHANKONG, DOHM

ART UNIT PAPER NUMBER

2152

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/921,240

Applicant(s)

WRAPE, JASON WAYNE

Examiner

Dohm Chankong

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1> This action is in response to Applicant's amendment and remarks, filed 4.7.2006.

Claims 1, 2, 10, 13 and 16 are amended. Claims 1-20 are presented for further examination.

2> This is a final rejection.

### *Response to Arguments*

3> Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant's amendment introducing the VPN element.

4> Applicant also presents arguments against the Ditmer reference. Applicant argues that Ditmer discloses displaying configuration information for a single PVC and its DLCI but not for a list of all of the assigned identifiers associated with all the permanent virtual connections of a port. Applicant's argument however presumes that there need be more than one PVC for each port. However, Applicant's claim even states that the network need only comprise one PVC associated with one identifier. Thus, even if Applicant's characterization of Ditmer is accurate -that Ditmer only discloses displaying information for a single PVC and its DLCI - since Ditmer discloses the claim language of having at least one PVC, the PVC having an endpoint with an assigned identifier and displaying this information to the client then Ditmer meets the amended language. Ditmer discloses that there are two DLCIs associated with a given PVC of a port [column 21 «lines 15-44»] and Ditmer enables a

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customer to remotely view both. Thus, Ditmer discloses displaying all of the identifiers associated with the PVC of a port.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5> The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6> Claims 1-7 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ditmer et al, U.S Patent No. 6,490,620 ["Ditmer"], in view of Ashton et al, U.S Patent No. 6,181,679 ["Ashton"], in further view of Pillai et al, U.S Patent Publication No. 2002|0052950 ["Pillai"].

7> Applicant has introduced limitations directed towards a VPN that connects a client with a network remote access module, wherein the VPN encrypts traffic through a tunnel. It should be noted that a VPN feature with tunneling functionality is well known in the art and is not a non-obvious feature that would render a claim patentable.

8> Regarding claim 1, Ditmer discloses a method, computer software and apparatus (hereafter collectively referred to as "system") for remotely displaying network configuration information for a first network that comprises at least one virtual connection, wherein the virtual connection has an endpoint associated with an identifier and wherein a network management system communicates with the first network to store the identifier, the system comprising: a remote access module in communication with the network management system over a network connection via a second network to obtain the identifier, and for remotely displaying the identifier over an external third network (Ditmer teaches a web based reporting downloadable module, which is loaded from a server to a client device, i.e., remote access module. Since the client device is able to load software module from the server, inherently they are coupled to each other. The client device is connected to a sever via public network, and capable of accessing a sever within MCI intranet network and retrieving information relating identifiers, connections or the like from the server to present to its client device using browser and applet. The client device with browser is capable of getting, setting and presenting PVC, e.g., obtaining and displaying link identifier. In addition, Ditmer's inventive concept supports heterogeneous networks, which includes Frame relay network. [See Fig.5, 12-13, Col.2, lines 28-67; Col.18, lines 10-44; Col.21, lines 15-44]).

Ditmer does not expressly disclose the network management system containing the identifier stored prior to the module communicating for the identifier. Ditmer discloses that a client establishes a secure connection to the remote access module [column 9 «lines 42-46»], but does not expressly disclose a VPN.

9> In a similar field of invention, Ashton is directed towards network management system that centrally stores virtual connection information and is accessible by various network modules over multiple networks [Figure 1 | column 2 «line 64» to column 3 «line 16» | column 4 «line 66» to column 5 «line 3»]. Ashton's system is comparable to the network management system in Ditmer in that a user is enabled to retrieve virtual connection information, including identifiers, and provisioning these identifiers [see Ashton, column 3 «lines 10-43»].

Ashton expressly discloses a network management system containing the identifier stored prior to the module communicating for the identifier [column 3 «lines 1-9» | column 5 «lines 40-52» | column 7 «lines 24-32» where: the virtual connection information is stored as "vectors" at the network management system]. As discussed previously, Ditmer disclosed functionality of providing reports from the previous 45 days suggesting storing of the identifiers. Ashton explicitly discloses such functionality and provides further motivation to modify Ditmer central management system to store the identifiers before they are requested such that it can efficiently manage the nodes within the networks [see Ashton, column 3 «lines 59-67»].

10> VPNs are widely known in the art for providing a secure means for users to safely access or connect to a remote network. For example, Pillai discloses utilizing a VPN to enable a user to access a remote module to obtain network configuration information

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[abstract | 0028]. Pillai additionally teaches that a VPN is a well known method for enabling secure connections across a network [0028].

. Given this teaching, coupled with Ditmer's disclosure of utilizing a secure connection, it would have been obvious to one of ordinary skill in the art to incorporate VPN functionality into Ditmer's system as a means of providing secure connections for remote users.

II> As to claim 10, Ditmer discloses a method for provisioning a data link connection identifier in a network upon request from a web browser, wherein the network comprises at least one permanent virtual connection, and wherein the virtual connection has an endpoint associated with an identifier, the method comprising:

connecting a network management system to the first network, wherein the network management system stores the identifier [Fig.5, 12-13, Col.2, lines 28-67; Col.18, lines 10-44; Col.21, lines 15-44];

connecting a network management module to the network management system via a second network to obtain the identifier, wherein the network management module is capable of remotely displaying the identifier over an external third network [Fig.5, 12-13, Col.2, lines 28-67; Col.18, lines 10-44; Col.21, lines 15-44];

querying the network management system with the network management module over the second network [Fig.5, 12-13, Col.2, lines 28-67; column 14 «lines 33-42»];

displaying the identifier in a web page over the external third network using the network management module in response to the browser request, wherein the request

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contains at least one of a logical and physical port name, wherein further the web page comprises identifier information under column headings including at least "Source Switch", "Source Logical Port Name", "Source DLCI", "Source Service Type", "Destination Switch", "Destination Port", "Destination DLCI", "Destination Service Type" and a "Committed Information Rate" [column 21 «lines 28-45» : DLCI assigned to the A and B sides of the PVC, gateways (switches) assigned to the A and B sides & circuit (port) names assigned to the A and B sides | column 24 «line 55» | column 26 «lines 22-25»].

While Ditmer does not expressly disclose the headings in one table, Ditmer does disclose that the reports are customizable by the user [abstract : "ad-hoc report customization"]. Thus, the limitation of viewing various parameters of a port in one table is merely a matter of design choice and is not a feature that patentably distinguishes the claimed invention over the prior art.

Ditmer does not expressly disclose: (a) storing the identifier prior to the request from the web browser nor does he disclose: (b) manually provisioning by a technician a unique identifier for a new virtual connection, wherein the unique identifier differs from the displayed identifier.

12> In regards to (a), see rejection of claim 1 in this action. In regards to (b), Ashton discloses provisioning a unique identifier for a new permanent virtual connection manually by a service technician, wherein the unique identifier differs from a displayed identifier [column 4 «lines 17-22» | column 7 «line 47» to column 8 «line 12» where : Ashton provides alternate route provisioning where network management personnel define the route]. It



would have been obvious to one of ordinary skill in the art to modify Ditmer's management system to incorporate Ashton's provisioning functionality. Such a combination would improve Ditmer by providing his system the capability of establishing alternate virtual connections at a node [see Ashton, column 3 «lines 33-43»].

13> As to claim 13, Ditmer discloses a system for provisioning a data link connection identifier in a network upon request from a web browser, wherein the network comprises at least one virtual connection, and wherein the virtual connection has an endpoint associated with an identifier, the method comprising:

means for the network management system to collect switch identifiers in-band over the first network and from an out of band network using a network management protocol [column 2 «lines 28-39» | column 13 «lines 6-20» where : Ditmer discloses utilizing a reporting system specific to the customer's broadband network (first network) AND utilizing SNMP (out of band)].

means for querying the network management system with the network management module over the second network to obtain the existing identifiers[Fig.5, 12-13, Col.2, lines 28-67; column 14 «lines 33-42»]; and

means for displaying the identifier over the external third network using the network management module, wherein the network management module is a web site [column 2 «lines 9-27» : customer utilizes a web browser | column 21 «lines 35-45»].

Ditmer does not expressly disclose: (a) storing the identifier prior to the request from the web browser nor does he disclose: (b) manually provisioning a unique identifier for a new

virtual connection, wherein the unique identifier differs from the displayed identifier.

However see rejection of claims 1 and 10 above.

14> Regarding claim 16, Ditmer discloses a medium for provisioning a data link connection identifier in a network upon request from a web browser, wherein the network comprises at least one virtual connection, and wherein the virtual connection has an endpoint associated with an identifier, the method comprising:

connecting a network management module to a network management system that stores identifiers associated with endpoints of virtual connections of a first network over a second network to obtain the identifiers, wherein the network management module is capable of remotely displaying the identifiers in a web page over an external third network in response to a browser request [Fig.5, 12-13, Col.2, lines 9-67; Col.18, lines 10-44; Col.21, lines 15-44];

querying the network management system with the network management module over the second network for a list of identifiers related to a switch in the first network [Fig.5, 12-13, Col.2, lines 28-67; column 14 «lines 33-42»]; and

displaying the identifier over the external third network using the network management module [column 21 «lines 35-45»].

Ditmer does not expressly disclose: (a) storing the identifier prior to the request from the web browser nor does he disclose: (b) manually provisioning a unique identifier for a new virtual connection, wherein the unique identifier differs from the displayed identifier.

15> As to claims 2-7, 9, 11, 12, 14, 15 and 17-20, see previous Office action.

16> Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ditmer, as applied to claim 7, in view of what was well known in the art. [see previous Office action].

17> Claims 1-7 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ditmer et al, U.S Patent No. 6,490,620 ["Ditmer"], in view of Iwasaki, U.S Patent No. 6,381,641, in further view of Pillai et al, U.S Patent Publication No. 2002/0052950 ["Pillai"].

18> Regarding claim 1, Ditmer discloses a method, computer software and apparatus (hereafter collectively referred to as "system") for remotely displaying network configuration information for a first network that comprises at least one virtual connection, wherein the virtual connection has an endpoint associated with an identifier and wherein a network management system communicates with the first network to store the identifier, the system comprising: a remote access module in communication with the network management system over a network connection via a second network to obtain the identifier, and for remotely displaying the identifier over an external third network (Ditmer teaches a web based reporting downloadable module, which is loaded from a server to a client device, i.e., remote access module. Since the client device is able to load software module from the server, inherently they are coupled to each other. The client device is connected to a sever via public network, and capable of accessing a sever within MCI intranet network and retrieving information relating identifiers, connections or the like from the server to present

to its client device using browser and applet. The client device with browser is capable of getting, setting and presenting PVC, e.g., obtaining and displaying link identifier. In addition, Ditmer's inventive concept supports heterogeneous networks, which includes Frame relay network. [See Fig.5, 12-13, Col.2, lines 28-67; Col.18, lines 10-44; Col.21, lines 15-44]).

Ditmer does not expressly disclose the network management system containing the identifier stored prior to the module communicating for the identifier. Ditmer discloses that a client establishes a secure connection to the remote access module [column 9 «lines 42-46»], but does not expressly disclose a VPN. See Ditmer-Pillai rejection above.

19> In a similar field of invention, Iwasaki is directed towards network management system that centrally stores virtual connection information and is accessible by various network modules over multiple networks [abstract | Figure 1]. Ashton's system is comparable to the network management system in Ditmer in that a user is enabled to retrieve virtual connection information, including displaying all DLCIs associated with a port [see Iwasaki, Figure 5 | column 1 «lines 55» to column 2 «line 21»].

Iwasaki expressly discloses a network management system containing the identifier stored prior to the module communicating for the identifier [column 4 «lines 30-37»]. As discussed previously, Ditmer disclosed functionality of providing reports from the previous 45 days suggesting storing of the identifiers. Iwasaki explicitly discloses such functionality and provides further motivation to modify Ditmer central management system to store the

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identifiers before they are requested such that it can efficiently manage the nodes within the networks.

20> As to claims 10, 13 and 16, see rejection of claim 1 above [items 18 and 19] and claims 10, 13 and 16 above [items 11-14]. Additionally, Iwasaki discloses displaying a list of identifiers [Figure 5].

21> As to claims 2-9, 11, 12, 14, 15 and 17-20, see previous Office action.

#### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Byrd, Julie, "Discovering Frame Relay Networks with AutoDiscovery and Layout", <http://www.microsoft.com/technet/archive/visio/frame.msp?pf=true>, August 2001. [see specifically "Listing Data Link Connection Identifiers" and the PVC summary report].

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Monday-Thursday [7:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER

DC